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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,839	12/20/2001	Shanti Swarup	1716A1	3341

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PPG INDUSTRIES INC  
INTELLECTUAL PROPERTY DEPT  
ONE PPG PLACE  
PITTSBURGH, PA 15272

EXAMINER

WOODWARD, ANA LUCRECIA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/028,839	Applicant(s) SWARUP ET AL. <span style="float: right;">S.C.</span>	
	Examiner Ana L. Woodward	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on April 21, 2004
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-13, 16-18 and 20-54 is/are pending in the application.
- 4a) Of the above claim(s) 22-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-13, 16-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/22/2003</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 22-54 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on July 16, 2003 and October 15, 2003.

### ***Claim Rejections - 35 USC § 112***

2. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 5 and 6, it is unclear as to whether the various R groups recited are those of the diamine or those of the triamine component.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 4,122,069 (Meyer).

Meyer discloses polyether dicarbamates having terminal hydroxyalkyl carbamate groups. In example I, a polyoxypropylenepolyamine Jeffamine D-2000, which is the same diamine material described in Applicants' specification at page 9, is reacted with ethylene carbonate for

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several hours at 135° – 150° C. The reaction product of the reference reads on the corresponding product of the present claims.

***Claim Rejections - 35 USC § 102/103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 and 9-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 4,704,446 (Goel).

Goel disclose the use of poly(alkylene ether)urethane polyols in the production of polyurethanes. In example 1, a poly(alkylene ether)urethane polyol is prepared by reacting a poly(propylene ether) triamine, which reads on the presently claimed triamine, with propylene carbonate. It is reasonably believed that the ratio of equivalents of amine to equivalents of cyclic carbonate meets those of the presently claimed invention. The onus is shifted to applicants to establish that the products of the present claims are not the same as or obvious from those set forth by the reference.

Even if it turns out that the exemplified reaction product does not meet the amine/carbonate equivalent ratio of the present claims, it is maintained that by being silent relative to the ratio, the reference implicitly suggests the use of ratios as claimed with the reasonable expectation of success.

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***Claim Rejections - 35 USC § 103***

7. Claims 11-13, 16-18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 4,122,069 (Meyer) described hereinabove.

With respect to claim 11, it is maintained that it would have been obvious to use the presently claimed homologous carbonate species in lieu of the reference's preferred ethylene carbonate species because said carbonate compounds are generically included in the general description of suitable hydroxyalkyl carbamate compounds (column 4, lines 62-64). Accordingly, absent evidence of unusual or unexpected results, no patentability can be seen in the use of one well-known carbonate for its homologous component.

With respect to claim 16, while the reference does not indicate the percent of theoretical completion, it is maintained that it would have been within the skill of the artisan of ordinary skill in the art to manipulate the process conditions so as to arrive at the desired degree of completion. It is noted that the reference reacts the components such that the resultant product has a molecular weight of up to about 3,000.

8. Claims 16-18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 4,704,446 (Goel) described hereinabove.

With respect to claim 16, while the reference does not indicate the percent of theoretical completion, it is maintained that it would have been within the skill of the artisan of ordinary skill in the art to manipulate the process conditions so as to arrive at the desired degree of completion. It is noted that the reference reacts the components such that the resultant product has a molecular weight of up to 20,000.

***Response to Amendment***

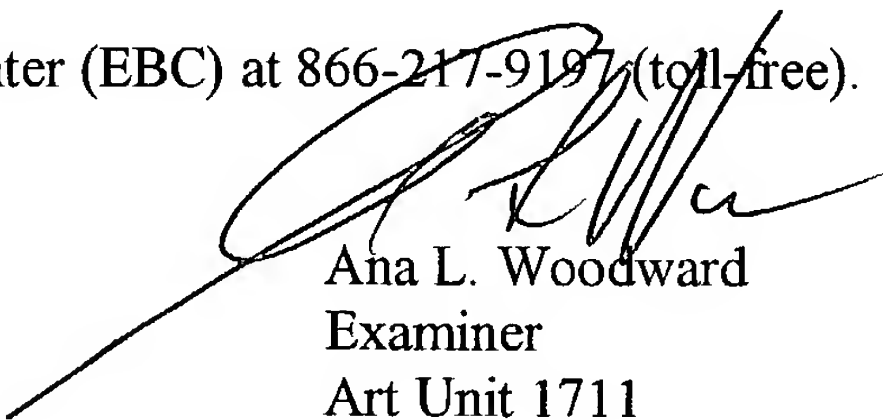
9. The amendment filed April 21, 2004 has effectively overcome the rejection over U.S. 4,585,566.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ana L. Woodward  
Examiner  
Art Unit 1711

AW